


```
LL      IIIIII  BBBB BBBB  IIIIII  NN      NN  SSSSSSSS  VV      VV
LL      IIIIII  BBBB BBBB  IIIIII  NN      NN  SSSSSSSS  VV      VV
LL      II      BB      BB  II      NN      NN  SS      VV      VV
LL      II      BB      BB  II      NN      NN  SS      VV      VV
LL      II      BB      BB  II      NNNN   NN  SS      VV      VV
LL      II      BB      BB  II      NNNN   NN  SS      VV      VV
LL      II      BBBB BBBB  II      NN      NN  SSSSSS  VV      VV
LL      II      BBBB BBBB  II      NN      NN  SSSSSS  VV      VV
LL      II      BB      BB  II      NN      NN  SS      VV      VV
LL      II      BB      BB  II      NN      NN  SS      VV      VV
LL      II      BB      BB  II      NN      NN  SS      VV      VV
LLLLLLLLLLLL  IIIIII  BBBB BBBB  IIIIII  NN      NN  SSSSSSSS  VV      VV
LLLLLLLLLLLL  IIIIII  BBBB BBBB  IIIIII  NN      NN  SSSSSSSS  VV      VV

LL      IIIIII  SSSSSSSS
LL      IIIIII  SSSSSSSS
LL      II      SS
LL      II      SS
LL      II      SS
LL      II      SS
LL      II      SSSSSS
LL      II      SSSSSS
LL      II      SS
LL      II      SS
LL      II      SS
LL      II      SS
LLLLLLLLLLLL  IIIIII  SSSSSSSS
LLLLLLLLLLLL  IIIIII  SSSSSSSS
```

(2) 49
(3) 72

DECLARATIONS
LIB\$INSV - insert a field


```
0000 1 .TITLE LIB$INSV - insert a variable length bit field
0000 2 .IDENT /1-002/ ; File: LIBINSV.MAR
0000 3
0000 4
0000 5 *****
0000 6 *
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0000 24 *
0000 25 *
0000 26 *****
0000 27
0000 28
0000 29 ++
0000 30 FACILITY: General Utility Library
0000 31
0000 32 ABSTRACT:
0000 33
0000 34 Insert a portion of the source into an area determined by the base,
0000 35 position, and size.
0000 36
0000 37 ENVIRONMENT: User Mode, AST Reentrant
0000 38
0000 39 --
0000 40 AUTHOR: Donald G. Petersen, CREATION DATE: 30-Dec-77
0000 41
0000 42 MODIFIED BY:
0000 43
0000 44 DGP, 30-Dec-77 : VERSION 00
0000 45 01 - Original
0000 46 1-001 - Update version number and copyright notice. JBS 16-NOV-78
0000 47 1-002 - Add " " to PSECT directives. JBS 21-DEC-78
```

```
0000 49      .SBTTL DECLARATIONS
0000 50 :
0000 51 : INCLUDE FILES:
0000 52 :
0000 53 :
0000 54 :
0000 55 : MACROS:
0000 56 :
0000 57 :
0000 58 :
0000 59 : EQUATED SYMBOLS:
0000 60 :
0000 61 :
0000 62 :
0000 63 : OWN STORAGE:
0000 64 :
0000 65 :
0000 66 :
0000 67 : PSECT DECLARATIONS:
0000 68 :
0000 69 : .PSECT _LIB$CODE PIC, SHR, LONG, EXE, NOWRT
0000 70
```

```
0000 72 .SBTTL LIB$INSV - insert a field
0000 73 :++
0000 74 : FUNCTIONAL DESCRIPTION:
0000 75 :
0000 76 : The field specified by the base, position, and size is replaced by bits
0000 77 : size-1 : 0 of the source. If the size is zero, no insertion is performed.
0000 78 : A reserved operand fault occurs if a size greater than 32 is specified.
0000 79 :
0000 80 : CALLING SEQUENCE:
0000 81 :
0000 82 : CALL LIB$INSV (src.rl.r, pos.rl.r, size.rbu.r, base.wv.r)
0000 83 :
00000004 0000 84 : SOURCE = 4 ; Adr. of source
00000008 0000 85 : POSITION = 8 ; Adr. of beginning position
0000000C 0000 86 : SIZE = 12 ; Adr. of size to insert
00000010 0000 87 : BASE = 16 ; Adr. of base to insert into
0000 88 : INPUT PARAMETERS:
0000 89 :
0000 90 : NONE
0000 91 :
0000 92 : IMPLICIT INPUTS:
0000 93 :
0000 94 : NONE
0000 95 :
0000 96 : OUTPUT PARAMETERS:
0000 97 :
0000 98 : NONE
0000 99 :
0000 100 : IMPLICIT OUTPUTS:
0000 101 :
0000 102 : NONE
0000 103 :
0000 104 : COMPLETION CODES:
0000 105 :
0000 106 : NONE
0000 107 :
0000 108 : SIDE EFFECTS:
0000 109 :
0000 110 : SSS_ROPRAND - a reserved operand fault occurs if:
0000 111 : 1.) a size greater than 32 is specified
0000 112 : 2.) a position greater is greater than 31 and the field is in
0000 113 : registers
0000 114 :
0000 115 : --
0000 116 :
0000 117 : .ENTRY LIB$INSV , ^M< > ; Entry point
0002 118 :
10 BC 0C BC 08 BC 04 BC F0 0002 119 : INSV @SOURCE(AP), @POSITION(AP), -
000B 120 : @SIZE(AP), @BASE(AP) ; insert source field
04 000B 121 : RET
000C 122 : .END
```


LIB\$INSV
Symbol table

- insert a variable length bit field^{F 2}

16-SEP-1984 00:12:09 VAX/VMS Macro V04-00
6-SEP-1984 11:08:18 [LIBRTL.SRC]LIBINSV.MAR;1

Page 4
(3)

BASE = 00000010
LIB\$INSV = 00000000 RG 01
POSITION = 00000008
SIZE = 0000000C
SOURCE = 00000004

+-----+
! Psect synopsis !
+-----+

PSECT name	Allocation	PSECT No.	Attributes
ABS	00000000 (0.)	00 (0.)	NOPIC USR
LIB\$CODE	0000000C (12.)	01 (1.)	PIC USR

CON ABS LCL NOSHR NOEXE NORD NOWRT NOVEC BYTE
CON REL LCL SHR EXE RD NOWRT NOVEC LONG

+-----+
! Performance indicators !
+-----+

Phase	Page faults	CPU Time	Elapsed Time
Initialization	29	00:00:00.07	00:00:02.33
Command processing	102	00:00:00.35	00:00:04.44
Pass 1	64	00:00:00.22	00:00:02.96
Symbol table sort	0	00:00:00.00	00:00:00.00
Pass 2	38	00:00:00.16	00:00:00.87
Symbol table output	1	00:00:00.01	00:00:00.01
Psect synopsis output	2	00:00:00.02	00:00:00.02
Cross-reference output	0	00:00:00.00	00:00:00.00
Assembler run totals	238	00:00:00.83	00:00:10.63

The working set limit was 750 pages.
1169 bytes (3 pages) of virtual memory were used to buffer the intermediate code.
There were 10 pages of symbol table space allocated to hold 5 non-local and 0 local symbols.
122 source lines were read in Pass 1, producing 10 object records in Pass 2.
0 pages of virtual memory were used to define 0 macros.

+-----+
! Macro library statistics !
+-----+

Macro library name	Macros defined
_\$255\$DUA28:[SYSLIB]STARLET.MLB;2	0

0 GETS were required to define 0 macros.

There were no errors, warnings or information messages.

MACRO/ENABLE=SUPPRESSION/DISABLE=(GLOBAL,TRACEBACK)/LIS=LIS\$:LIBINSV/OBJ=OBJ\$:LIBINSV MSRC\$:LIBINSV/UPDATE=(ENHS:LIBINSV)

0208 AH-BT13A-SE
VAX/VMS V4.0

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